

CLAIMS

What I claim is:

1. A method of forming a thermoplastic article comprising the steps of providing a thermoplastic polymer, introducing at least one silver-containing antimicrobial agent and 0.1% to 0.75% by weight of the total polymer of at least one carboxylic acid salt component thereto, melting said resultant mixture of polymer, silver-containing antimicrobial agent, and at least one carboxylic acid salt, and cooling said molten mixture in a desired shaped thermoplastic article.
2. The method of Claim 1 wherein said carboxylic acid salt is present in an amount of from about 0.2 to about 0.5% by weight of the polymer.
3. The method of Claim 2 wherein said carboxylic acid salt is present in an amount of from 0.2 to about 0.4% by weight of the total polymer.
4. The method of Claim 3 wherein said carboxylic acid salt is present in an amount of about 0.3% by weight of the total polymer.
5. The method of Claim 4 wherein said at least one silver-containing antimicrobial agent is an inorganic silver-containing compound and wherein said at least one carboxylic acid salt is selected from the group consisting of at least C₁-C₄₀ carboxylic acid compound neutralized by at least one cation selected from the group consisting of monovalent metal ions, bivalent ions, and trivalent metal ions.

6. The method article of Claim 5 wherein said inorganic silver-containing antimicrobial agent is selected from the group consisting of silver zirconium phosphates, silver glasses, silver zeolites, and any mixtures thereof, and said carboxylic acid salt is selected from the group consisting of alkali metal acetates, alkali metal stearates, alkaline earth metal acetates, alkaline earth metal stearates, zinc stearate, tin(II) stearate, aluminum stearate, and any mixtures thereof.

7. The method of Claim 6 wherein said inorganic silver-containing antimicrobial agent is silver zirconium phosphate, and wherein said carboxylic acid salt is calcium stearate.